

THE INVENTION CLAIMED IS:

1. An apparatus comprising:

a spray bar having an alignment mark and one  
5 or more openings, the spray bar configured to output a fluid  
spray from the one or more openings;

a mounting device having an alignment mark,  
the mounting device configured to support the spray bar; and

a substrate support configured to support a  
10 substrate;

wherein the alignment mark of the spray bar  
and the alignment mark of the mounting device may be aligned  
so as to position a fluid spray output by the spray bar  
toward a substrate supported by the substrate support.

2. The apparatus of claim 1 wherein the one or  
more openings comprise one or more nozzles.

3. The apparatus of claim 1 further comprising a  
20 scrubber brush configured to contact a surface of a  
substrate supported by the substrate support.

4. The apparatus of claim 1 wherein the  
alignment mark of the spray bar and the alignment mark of  
25 the mounting device comprise a pair of holes.

5. The apparatus of claim 1 wherein at least one  
of the alignment mark of the spray bar and the alignment  
mark of the mounting device comprises a notch.

6. The apparatus of claim 1 wherein the spray  
bar comprises a plurality of alignment marks.

7. The apparatus of claim 1 wherein the mounting device comprises a plurality of alignment marks.

8. A method comprising:

5 providing a spray bar having an alignment mark, the spray bar adapted to output a fluid spray;

providing a mounting device having an alignment mark, the mounting device adapted to support the spray bar; and

10 aligning the alignment mark of the spray bar and the alignment mark of the mounting device so as to position a fluid spray output by the spray bar toward a substrate supported by the substrate support.

9. A scrubber device comprising:

15 a spray bar having an alignment mark, the spray bar configured to output a fluid spray;

a mounting device having an alignment mark, the mounting device configured to support the spray bar;

20 a substrate support configured to support a substrate; and

at least one scrubber brush configured to contact a surface of a substrate supported by the substrate support;

25 wherein the alignment mark of the spray bar and the alignment mark of the mounting device may be aligned so as to position a fluid spray output by the spray bar toward the at least one scrubber brush.

30 10. The scrubber device of claim 9 wherein the one or more openings comprise one or more nozzles.

11. The scrubber device of claim 9 wherein the alignment mark of the spray bar and the alignment mark of the mounting device comprise a pair of holes.

5 12. The scrubber device of claim 9 wherein at least one of the alignment mark of the spray bar and the alignment mark of the mounting device comprises a notch.

10 13. The scrubber device of claim 9 wherein the spray bar comprises a plurality of alignment marks.

14. The scrubber device of claim 9 wherein the mounting device comprises a plurality of alignment marks.

15 15. A method comprising:  
providing a spray bar having an alignment mark, the spray bar adapted to output a fluid spray;  
providing a mounting device having an alignment mark, the mounting device adapted to support the  
20 spray bar;  
providing at least one scrubber brush adapted to contact a surface of a substrate supported by the substrate support; and  
aligning the alignment mark of the spray bar  
25 and the alignment mark of the mounting device so as to position a fluid spray output by the spray bar toward the at least one scrubber brush.

30 16. An apparatus configured to rinse and dry a substrate, comprising:

a tank of cleaning fluid configured to at least partially submerge a substrate;

a lifting mechanism configured to lift a substrate from the cleaning fluid; and

a drying vapor source positioned to supply drying vapors to an air/substrate/cleaning fluid interface  
5 formed when the lifting mechanism lifts a substrate from the cleaning fluid, the drying vapor source comprising:

a spray bar having an alignment mark and one or more openings, the spray bar configured to output a drying vapor from the one or more openings; and

10 a mounting device having an alignment mark, the mounting device configured to support the spray bar;

wherein the alignment mark of the spray bar and the alignment mark of the mounting device may be  
15 aligned so as to position a drying vapor output by the spray bar toward the air/substrate/cleaning fluid interface.

17. The apparatus of claim 16 wherein the one or more openings comprise one or more nozzles.

20 18. The apparatus of claim 16 wherein the alignment mark of the spray bar and the alignment mark of the mounting device comprise a pair of holes.

25 19. The apparatus of claim 16 wherein at least one of the alignment mark of the spray bar and the alignment mark of the mounting device comprises a notch.

30 20. The apparatus of claim 16 wherein the spray bar comprises a plurality of alignment marks.

21. The apparatus of claim 16 wherein the mounting device comprises a plurality of alignment marks.

22. A method for cleaning, rinsing and drying a substrate comprising:

at least partially submerging a substrate in  
5 a tank of cleaning fluid;

lifting the substrate from the cleaning  
fluid;

providing a spray bar having an alignment  
mark, the spray bar adapted to output a drying vapor;

10 providing a mounting device having an  
alignment mark, the mounting device adapted to support the  
spray bar; and

aligning the alignment mark of the spray bar  
and the alignment mark of the mounting device so as to  
15 position a drying vapor output by the spray bar toward an  
air/substrate/cleaning fluid interface formed when the first  
substrate is lifted from the cleaning fluid.

23. An apparatus configured to rinse and dry a  
20 substrate, comprising:

a tank of cleaning fluid configured to at  
least partially submerge a substrate;

a lifting mechanism configured to lift a  
substrate from the cleaning fluid;

25 a rinsing fluid source positioned to supply  
rinsing fluid to a surface of a substrate as the lifting  
mechanism lifts the substrate from the cleaning fluid,  
wherein the rinsing fluid contacts the substrate thereby  
forming an air/substrate/rinsing fluid interface; and

30 a drying vapor source positioned to supply  
drying vapors to the air/substrate/rinsing fluid interface,  
the drying vapor source comprising:

a spray bar having an alignment mark and one or more openings, the spray bar configured to output a drying vapor from the one or more openings; and

a mounting device having an alignment mark, the mounting device adapted to support the spray bar; wherein the alignment mark of the spray bar and the alignment mark of the mounting device may be aligned so as to position a drying vapor output by the spray bar toward the air/substrate/rinsing fluid interface.

24. The apparatus of claim 23 wherein the one or more openings comprise one or more nozzles.

25. The apparatus of claim 23 wherein the alignment mark of the spray bar and the alignment mark of the mounting device comprise a pair of holes.

26. The apparatus of claim 24 wherein at least one of the alignment mark of the spray bar and the alignment mark of the mounting device comprises a notch.

27. The apparatus of claim 24 wherein the spray bar comprises a plurality of alignment marks.

28. The apparatus of claim 24 wherein the mounting device comprises a plurality of alignment marks.

29. A method for cleaning, rinsing and drying a substrate comprising:  
at least partially submerging a substrate in a tank of cleaning fluid;  
lifting the substrate from the cleaning fluid;

spraying rinsing fluid onto the surface of the substrate as the substrate is lifted, thereby forming an air/substrate/rinsing fluid interface;

providing a spray bar having an alignment mark, the spray bar adapted to output a drying vapor;

providing a mounting device having an alignment mark, the mounting device adapted to support the spray bar; and

aligning the alignment mark of the spray bar and the alignment mark of the mounting device so as to position a drying vapor output by the spray bar toward the air/substrate/rinsing fluid interface.

30. An apparatus configured to rinse and dry a substrate, comprising:

a tank of cleaning fluid configured to at least partially submerge a substrate;

a lifting mechanism coupled to the tank and configured to lift a substrate from the cleaning fluid;

a rinsing fluid source positioned to supply rinsing fluid to a surface of a substrate as the lifting mechanism lifts the substrate from the cleaning fluid, wherein the rinsing fluid contacts the substrate thereby forming an air/substrate/rinsing fluid interface, wherein the rinsing fluid source comprises:

a spray bar having an alignment mark and one or more openings, the spray bar configured to output rinsing fluid from the one or more openings; and

a mounting device having an alignment mark, the mounting device configured to support the spray bar;

wherein the alignment mark of the spray bar and the alignment mark of the mounting device may be

aligned so as to position rinsing fluid output by the spray bar toward an air/substrate interface thereby forming the air/substrate/rinsing fluid interface; and

a drying vapor source positioned to supply a  
5 drying vapor to the air/substrate/rinsing fluid interface.

31. A method for cleaning, rinsing and drying a substrate comprising:

at least partially submerging a substrate in  
10 a tank of cleaning fluid;

lifting the substrate from the cleaning  
fluid;

providing a spray bar having an alignment  
mark, the spray bar adapted to output rinsing fluid;

providing a mounting device having an  
15 alignment mark, the mounting device adapted to support the spray bar;

aligning the alignment mark of the spray bar  
and the alignment mark of the mounting device so as to  
20 position rinsing fluid output by the spray bar toward the substrate thereby forming an air/substrate/rinsing fluid interface; and

supplying a drying vapor to the  
air/substrate/rinsing fluid interface.